AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning on page 27, line 17, as follows:

The origin of the new LMW-epiK5-amine-O-oversulfates from LMW-epiK5-sulfates obtained by nitrous depolymerization and subsequent reduction with, for example, sodium borohydride, involves, at the reducing end of the majority of the chains in said chain mixture, the presence of a 2,5-anhydromannitol sulfated unit of structure (a')

in which R"R represents hydrogen or SO₃.

Please amend the paragraph beginning on page 28, line 3, as follows:

Thus the reducing end of the majority of the chains in said chain mixture is represented by the structure (b')

in which the uronic unit can be glucuronic or iduronic.

Please amend the paragraph beginning on page 28, line 7, as follows:

Among the aforesaid new LMW-epiK5-amine-O-oversulfates, are preferred those consisting of mixtures in which the preponderant species is a compound of formula II'b

in which the uronic units are 40-60% consisting of iduronic acid, m is 4, 5 or 6, R, R' and R" are hydrogen or SO_3^- , X" is OH or OSO_3^- , for a sulfation degree of at least 3.4, advantageously of at least 3.5, more advantageously from 3.55 to 4, preferably from 3.55 to 3.8, the iduronic units being present alternately, starting with a glucuronic or iduronic unit, and the corresponding cation is one chemically or pharmaceutically acceptable ion.

Please amend the paragraph beginning on page 33, line 19, as follows:

The origin of the new LMW-epiK5-N,O-oversulfates from LMW-epiK5-sulfates obtained by nitrous depolymerization and subsequent reduction with, for example, sodium borohydride involves, at the reducing end of the majority of the chains in said chain mixture, the presence of a sulfated 2,5-anhydromannitol unit of structure (a') as shown above, in which $\frac{R^{2}R}{R}$ represents hydrogen or SO_{3}^{-1} .

Please amend the paragraph beginning at page 33, line 25, as follows:

Thus, the reducing end of the majority of the chains in said chain mixture is represented by the structure (b")

in which Z represents SO₃ and the uronic unit can be glucuronic or iduronic.

Please amend the paragraph beginning on page 34, line 5, as follows:

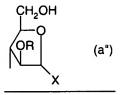
Among the aforesaid new LMW-epiK5-N,O-oversulfates, are preferred those consisting of mixtures in which the preponderant species is a compound of formula III'b

in which R, R' and R" are hydrogen or SO₃, Z is SO₃, X" is OH or OSO₃, m is 4, 5 or 6, for a sulfation degree of at least 4, preferably from 4 to 4.6, the uronic units are present alternately, starting with a glucuronic or iduronic unit, and the corresponding cation is one chemically or pharmaceutically acceptable ion. Said cations are advantageously those of alkaline metals, alkaline-earth metals, ammonium, (C₁-C₄)tetraalkylammonium, aluminum and zinc and, among these, preferably the ions of sodium, calcium and tetrabutylammonium.

Please amend the paragraph beginning at page 34, line 17, as follows:

If an epiK5 is used as a starting epiK5-derivative of the process of the present invention, i.e. a K5 polysaccharide, previously N-deacetylated, N-sulfated normally 100%, and 20-60% C5-epimerized and not depolymerized, upon termination of step (c) an epiK5-N,O-oversulfate is isolated which can be subjected to nitrous depolymerization and possible, subsequent reduction with, for example, sodium borohydride to obtain the corresponding LMW-epiK5-N,O-oversulfate having the same degree of sulfation. In particular, LMW-epiK5-N,O-oversulfates are obtained consisting of a chain mixture in which at least 90% of said chains have the formula III' or III'a, in which the uronic units are 20-60% consisting of iduronic acid, q, R, R' R" and Z have the meaning defined above, for a sulfation degree of at least 4, preferably from 4 to 4.6 and the corresponding cation is one chemically or pharmaceutically acceptable ion. In such case, the origin of these LMW-epiK5-N,O-oversulfates from a depolymerization reaction and possible, subsequent reduction with, for example, sodium borohydride involves, at the reducing end of the majority of the chains in said chain mixture, the presence of a 2,5-anhydromanno unit of structure (a")

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in which X is formyl or hydroxymethyl and $R^{2}\underline{R}$ represents hydrogen or SO_3 .